

## CLAIMS:

We claim:

1. A complex table rendering and navigation system comprising:

a plurality of row range views, a plurality of row views, each of said row views having an association with one of said row range views; and a plurality of record views, each of said record views having an association with one of said row views;

a complex table processor coupled to an application server and programmed to reduce a complex table into said row range views, said row views and said record views; and,

a controller configured to map selected events and triggers originating within said views to others of said views, and to map additional selected events and triggers originating within said views to said complex table.

2. The system of claim 1, further comprising a filter management view.

3. A method of enabling complex table navigation in a highly constrained device, the method comprising the steps of:

reducing a complex table defined in markup to a row range view, a set of row views and a set of record views;

navigably linking individual ones of said record views to selected ones of said row views, and further navigably linking individual ones of said row views to selected row ranges disposed in said row range view; and,

presenting said row range view responsive to a request to render said complex table in the highly constrained device.

4. The method of claim 3, further comprising the step of selecting and deselecting individual records in said record views.

5. The method of claim 3, further comprising the steps of:  
establishing a set of filter criteria for selecting individual records linked to said row views;

filtering a display of said row views based upon said filter criteria; and,  
rendering said filtered display in the highly constrained device.

6. The method of claim 3, further comprising the steps of:  
receiving a plurality of events generated in said views; and,  
handling selected ones of said events without knowledge of an application producing said complex table where said selected ones of said events map to said views and not to said complex table.

7. A method of enabling complex table navigation in a highly constrained device, the method comprising the steps of:

parsing a complex table defined by intent based markup;

producing a reduced view of said complex table, said reduced view comprising a selection of row ranges defining ranges of rows in said complex table, and rendering said reduced view in the highly constrained device;

responsive to a selection of one of said ranges of rows, further producing a further reduced view of said complex table, said further reduced view comprising a selection of rows in said selected one of said ranges of rows, and rendering said further reduced view in the highly constrained device in lieu of said reduced view; and,

responsive to a selection of one of said rows, yet further producing a yet further reduced view of said complex table, said yet further reduced view comprising a record associated with said selected one of said rows, and rendering said yet further reduced view in the highly constrained device in lieu of said further reduced view.

8. A machine readable storage having stored thereon a computer program for enabling complex table navigation in a highly constrained device, the computer program comprising a routine set of instructions for causing the machine to perform the steps of:

reducing a complex table defined in markup to a row range view, a set of row views and a set of record views;

navigably linking individual ones of said record views to selected ones of said row views, and further navigably linking individual ones of said row views to selected row ranges disposed in said row range view; and,

presenting said row range view responsive to a request to render said complex table in the highly constrained device.

9. The machine readable storage of claim 8, further comprising the step of selecting and deselecting individual records in said record views.

10. The machine readable storage of claim 8, further comprising the steps of:  
establishing a set of filter criteria for selecting individual records linked to said row views;

filtering a display of said row views based upon said filter criteria; and,  
rendering said filtered display in the highly constrained device.

11. The machine readable storage of claim 8, further comprising the steps of:  
receiving a plurality of events generated in said views; and,  
handling selected ones of said events without knowledge of an application producing said complex table where said selected ones of said events map to said views and not to said complex table.

12. A machine readable storage having stored thereon a computer program for enabling complex table navigation in a highly constrained device, the computer program comprising a routine set of instructions for causing the machine to perform the steps of:

parsing a complex table defined by intent based markup;

producing a reduced view of said complex table, said reduced view comprising a selection of row ranges defining ranges of rows in said complex table, and rendering said reduced view in the highly constrained device;

responsive to a selection of one of said ranges of rows, further producing a further reduced view of said complex table, said further reduced view comprising a selection of rows in said selected one of said ranges of rows, and rendering said further reduced view in the highly constrained device in lieu of said reduced view; and,

responsive to a selection of one of said rows, yet further producing a yet further reduced view of said complex table, said yet further reduced view comprising a record associated with said selected one of said rows, and rendering said yet further reduced view in the highly constrained device in lieu of said further reduced view.